

LISTING OF CLAIMS:

Claims 1 – 15 (Canceled).

16. (Currently Amended) An optical switching subsystem comprising:

a plurality of input optical ports for inputting ~~an~~ optical signal signals;

a plurality of output optical ports for outputting ~~the said~~ optical signal signals;

an optical switch formed by a micro electromechanical system (MEMS) for switching an optical path among said input optical ports and said output optical ports;

a subsystem controller circuit for controlling said optical switching subsystem;

a switching module controller circuit for controlling said optical switch;

a memory connected to said subsystem controller and said switching module controller, for storing control parameters related to said optical switch;

a monitor for outputting a signal to the subsystem controller according to said ~~output~~ signal optical signals;

a feedback control circuit for feedback controlling, wherein said feedback control circuit includes:

said memory;

a controlled object for outputting control output;

a controller for outputting output of controller to said controlled object;

a comparator for comparing said control output with reference value from said memory;

a controller output compensator for outputting controller output correction value;

a signal adder for adding the output of controller and the controller output correction value; and

a gain compensator for outputting control input to said controlled object.

17. (Currently Amended) An optical communication system comprising:
said optical switching subsystem according to claim 16, a host system said host system receiving information related to said optical switch from said optical switching subsystem.

18. (Original) The optical switching subsystem according to claim 16, comprising a ranking circuit for determining ranks of operation of switching elements.

Claims 19 – 25 (Canceled).